

THE SEARCH FOR SOLUTIONS

The problems surrounding state e-scrap programs have been well documented. Our experts describe the feasible policy options that could open the door to stability.

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The 25 states with e-scrap recycling laws have served as living laboratories to test and evaluate different policy approaches to increase electronics recycling from the residential sector. Clearly, the state programs have played a vital role in the nearly six-fold increase in e-scrap recycling, the Environmental Protection Agency recently reported. According to EPA data, recovery increased from 380 million pounds in 2000 to more than 2.5 billion pounds in 2013.

Still, experiences with implementation of state programs vary widely across the states, ranging from high performance and nearly unmitigated success, to low performance and significant challenges.

In the March 2015 issue of E-Scrap News, we detailed the problems that some state e-scrap recycling programs are facing as they struggle to keep pace with the constant stream of old TVs and as processors weather the stormy e-scrap markets. Experience suggests that state programs driven primarily by performance standards are less stable when faced with changing market conditions than programs designed around collection convenience standards. In programs built on performance standards, manufacturers are not covering the full cost of e-scrap processing, leaving collectors with the difficult choice of absorbing these costs or eliminating collection of unwanted electronics, thus undermining the original intent of the laws. The experience of state programs that have performance standards suggests that the economic model underlying these programs is flawed.

In this article, we will explore the lessons learned from both the struggling and more successful state programs. We look at the solu-

tions available to the troubled programs and consider policy options for the 25 states that still lack electronics recycling legislation.

As the struggling and lower-performing states work to address program challenges, and as states still lacking e-scrap laws seek to identify the best path forward, stakeholders are looking at a number of different options and approaches to inject greater stability into e-scrap recovery programs. These options include increasing performance targets, developing CRT-specific financing solutions, creating central management structures and establishing or strengthening convenience standards.

Increasing targets

Insufficient financial support from manufacturers has been at the core of the problems in states with performance targets and convenience standards for collection that are weak or nonexistent. One way to increase manufacturers' financial support is to increase their collection targets. The logic here dictates that if manufacturers need to collect more pounds to comply with a law, they will pay for more collection. If left up to manufacturers' discretion, companies will only pay for the required amount regardless of the amount of material coming in to be recycled. Although higher targets may not solve all of the states' woes, proponents hope boosted targets will "stop the bleeding."

Minnesota and Illinois have both successfully pursued this option recently by passing legislation that sets a fixed goal in statute (Minnesota set a one-year goal, while Illinois established a two-year target). Officials in these states see the new statutory goals

as short-term fixes that can be in place as they consider broader structural improvements. Stakeholders in New York and Wisconsin are also considering this approach, but bills have not yet been introduced.

What formula should states use to set manufacturer collection targets? This is a critical question. In most performance-standard states, collection targets are based on the weight of a manufacturer's recent sales. While new TVs and electronic devices are getting lighter, e-scrap returned for recycling is not. As a result, goals based on weight of devices sold are not keeping pace with unwanted electronics being returned for recycling. So while the weight of end-of-life electronics collected in a state may rise or only fall slightly, the performance targets in these states are falling fast.

For example, in Minnesota's 2013-2014 program year, the manufacturer target was 16 million pounds, but more than 35 million pounds of material got collected. The recent legislation passed in Minnesota froze the target at 16 million pounds to prevent the goal from falling even lower, but clearly this legislative measure will not meet the recycling demand.

At a minimum, formulas need fixing, especially in the states where manufacturer targets are based on a percentage of the weight of recent electronics sales (this is the arrangement in Illinois, Minnesota, Wisconsin, Pennsylvania and New Jersey). Instead of setting goals based on the weight of sales, states can base targets on actual pounds collected in recent years. This approach was the basis for the Illinois short-term fix, and is in place in Vermont and New York.

In Vermont, performance targets are calculated based on pounds collected through the prior two years. In New York, the target is based on weight collected over the previous three years.

However, even with a formula fix, the underlying instability in these programs will likely persist unless manufacturers commit to year-round support of collection sites and somehow coordinate their activities to ensure broad, convenient coverage. Increasing the goals, by establishing fixed goals in statute or basing goals on actual past collection, would be an improvement, but it would probably not be enough on its own to really solve the whole problem.

Ensuring year-round support

Much of the instability in programs with performance goals arises when manufac-

turers withdraw their support once their performance targets are met. This leaves recyclers and collectors facing unexpected costs. One way to fix that is to explicitly require manufacturers to provide year-round support to the sites in their collection network, whether or not targets have been met.

In Vermont, the law requires that manufacturers provide support on an "ongoing basis." In New York, the state's Department of Environmental Conservation recently informed manufacturers that they are expected to provide consumers of the state with "effective, continuous and reasonably convenient" collection. These simple provisions can prevent manufacturers from cutting off financial support to the recyclers and collection network, and lend stability to these programs.

Designing systems for CRTs

The cost of managing CRTs is at the core of the current financial pressures on state e-scrap systems. Presumably, CRTs pose a short- to medium-term problem, and some stakeholders suggest struggling states should be focusing on a solution specifically for these lead-laden, market-challenged devices. Some have gone so far as to say that EPR should only be in place for CRTs. Collection of other electronics, they argue, could be driven by market value.

One way to address the CRT problem would be to create a kind of guaranteed market for used CRTs. One IT manufacturer has floated a proposal for a CRT "safety net" for collectors that can't access manufacturer funding to cover the costs of the volume of CRTs they manage. This IT manufacturer proposes that the state agency establish contracts with one or more CRT processors to accept CRTs at no cost from collectors and/or recyclers in the state. The state would then apportion the costs out to the CRT manufacturers.

This type of system would not need to replace existing EPR systems, but could be an addition to, or a backstop for, existing systems that are struggling to manage CRT costs. Another industry official proposed allowing manufacturers to comply by contracting directly with CRT processors to "pull" a defined amount of CRTs through the system.

Already some states differentiate the obligations of CRT and non-CRT manufacturers. For example, in the Illinois short-term legislative fix, the increased performance target is explicitly separated: Two-

thirds of the collection target is assigned to CRT (TV and computer monitor) manufacturers, and one-third is assigned to the makers of other covered electronics. This places greater responsibility on the makers of the more expensive-to-manage items.

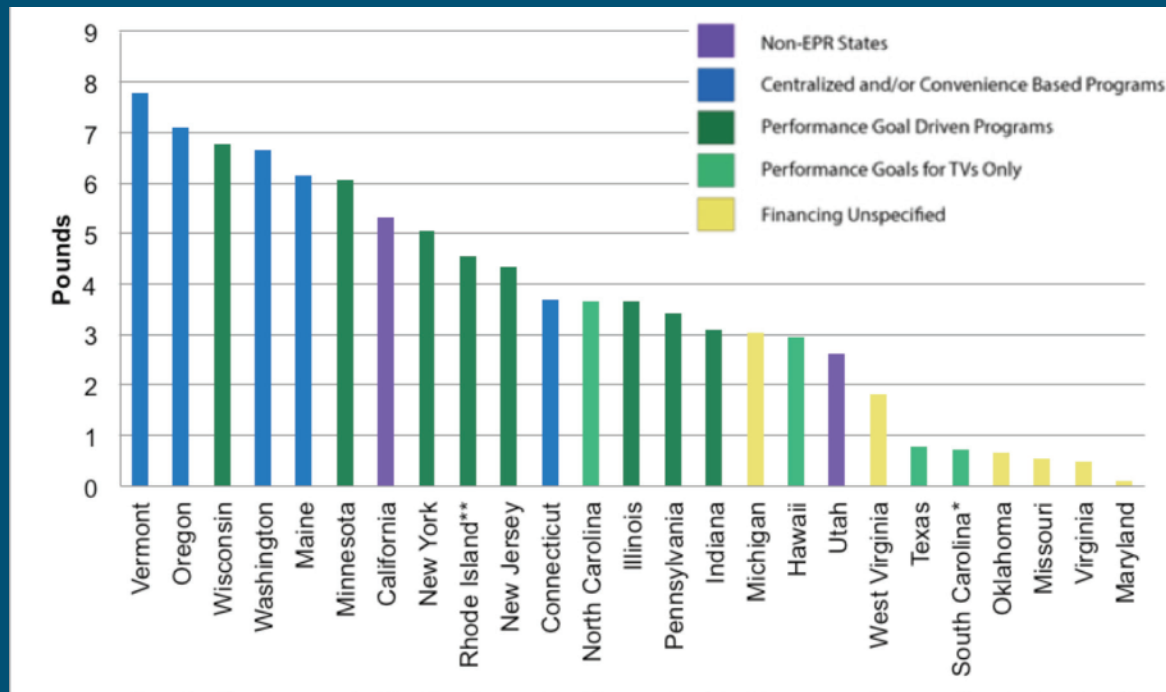
Management and coordination

The most stable e-scrap EPR laws in the U.S. have one thing in common: They created an entity to manage and coordinate e-scrap collection and recycling. In Oregon and Vermont, the law requires the government to contract the management of a state-wide collection network. In Washington, the state created the Washington Materials Management and Financing Authority, a quasi-public entity, to do so. In all three cases, the managing entity is responsible for making agreements with recyclers, managing a collection network that meets a convenience standard and apportioning costs to participating manufacturers. In all three states, manufacturers also have the option of creating their own stewardship programs that operate in parallel to the centrally managed system, and these "opt out" networks are required to meet similar convenience and performance targets. Vermont and Oregon both have manufacturer-run stewardship programs operating alongside the central entities.

A central management entity ensures transparency, coordination and organization within the collection network. It also prevents the free market from becoming a free-for-all that pinches out recyclers and collectors. In the states that have central management entities, collection sites have not had to pay for e-scrap recycling services and, in most cases, have received a stable and continuous revenue stream to help defray the cost of collection.

Despite the many positive aspects of these programs, not all stakeholders are supporters of the centrally managed systems. Manufacturers argue that centralized management structures drive up costs and give OEMs little choice or control over the system. Some government officials and advocates, meanwhile, point out that their state agencies don't have the capacity to manage these programs, or that it's not feasible to enact something as dramatic as a new management entity. And some EPR advocates, while acknowledging the benefits of central coordination, wonder whether the state ought to play such an integral role in a system where the manufacturers/producers

Figure 1 | Pounds of e-scrap collected per capita, 2013



Note: This chart presents available data on program performance, but does not provide an “apples to apples” comparison as the covered products and entities (residents, businesses, schools, etc.) vary from state to state.

Source: Chart is based on PSI analysis of data from the Electronics Recycling Coordination Clearinghouse.

should have predominant responsibility.

The electronics industry is very diverse and fragmented. These conditions make it unlikely that manufacturers will voluntarily collaborate. Recent legislative experience lends credence to this view. In 2014, South Carolina lawmakers amended the state’s e-scrap EPR legislation so that manufacturers could voluntarily create a producer responsibility organization (PRO) and collaborate on e-scrap collection. To date, only Best Buy, Samsung, and Panasonic have signed up.

Can electronics EPR laws require manufacturers to coordinate via a PRO? EPR laws for paint and carpet have done so, designating PaintCare and CARE, respectively, to manage their programs. To date, no state has attempted that approach with the electronics sector. Maybe it’s time to give that a try.

Standards and stability

Programs in Vermont, Oregon and Washington have convenience standards in place that appear to be contributing heavily to overall program stability. All three states rely on the same standard – every county must have a minimum number of collection sites (one in every county in Oregon

and Washington, two in Vermont) and one collection site for every community with a population greater than 10,000. The programs in Vermont and Oregon have performance targets as well. But in both states, the performance targets are superseded by the convenience standard. Washington’s law does not even include a manufacturer target on the premise that as long as residents have convenient access to e-scrap recycling, a performance target is not necessary.

Another important factor in creating stability is making sure the value of the e-scrap that is collected is kept as high as possible. Better operating standards for collection sites can help achieve this.

Washington has collection site operating standards included in its law. Vermont and Oregon have environmental rules that set the standards for e-scrap collectors. These operating standards can prevent cherry picking that results in leftover, unwanted, low-value e-scrap: Collection sites aren’t allowed to cut cords, remove the CRT yolks, harvest other valuable parts, or skim off high-value equipment. By doing so, they preserve the maximum commodity value for recyclers.

Collection site operating standards also address critical issues affecting worker safety, and the safety of the public who use the

collection sites. By including collection site operating standards in their laws, state officials can monitor sites for compliance and enforce penalties to ensure the safety and financial integrity of the system.

Another trend in recent years has been for state programs to expand the scope of products covered by their law. States such as Illinois, Maine, Maryland, Oregon and Texas have expanded their programs. Some expanded to include new market entrants, like tablets and e-readers, while others added more products with the intent of maximizing the use of the collection infrastructure built under the EPR laws.

Washington and Minnesota are currently looking to expand the scope of products in their programs. Items like game consoles, VCRs, cable boxes and tablets can be managed in the same stream as computers and televisions. These days, their internal components are no different from currently covered devices, and some of these products add value to the e-waste stream for recyclers.

Lessons learned

Electronics recycling laws in 25 states have diverted hundreds of millions of pounds of e-scrap from disposal and directed that mate-

rial to productive reuse and recycling markets. The laws were (and still are) critical to the recovery of this fast-growing, costly, and sometimes toxic portion of the waste stream, and they have been significant contributors to the 40 percent recovery rate for certain electronics that the EPA recently reported.

The lessons learned are clear. Legislation needs to provide manufacturers with specific and detailed requirements if they are to provide consistent, year-round support. Using the weight of sales as the basis for collection standards in recycling laws and statutes is failing to keep pace with today's e-scrap collection demands. And finally, even well-financed collection networks can do better when it comes to safety and preserving e-scrap's value.

As the struggling states look to revamp their electronics recovery programs, and the other half of the country seeks to establish

new laws, these lessons can go a long way toward ensuring long-term stability and success. **ESN**

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